STATE REVIEW FRAMEWORK

Tennessee

Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act Implementation in Federal Fiscal Year 2014

> U.S. Environmental Protection Agency Region 4, Atlanta

> > Final Report September 29, 2016

Executive Summary

Introduction

EPA Region 4 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Tennessee Department of Environment and Conservation (TDEC).

EPA bases SRF findings on data and file review metrics, and conversations with program management and staff. EPA will track recommended actions from the review in the SRF Tracker and publish reports and recommendations on EPA's ECHO web site.

Areas of Strong Performance

- CWA data entry into ICIS-NPDES was complete.
- CAA, CWA and RCRA inspection reports were well written and complete.
- TDEC accurately identified CAA and RCRA violations and appropriately addressed the violations with enforcement actions that returned facilities to compliance. RCRA actions were also timely.
- TDEC documented the difference between initial and final penalty calculations in CAA and RCRA. RCRA also documented the calculation of economic benefit in their penalties.

Priority Issues to Address

The following are the top-priority issues affecting the state program's performance:

- TDEC should document the calculation of economic benefit or the rationale for excluding economic benefit of noncompliance in CAA and CWA penalty calculations. CWA should also document the difference between initial and final penalty calculations.
- TDEC should meet grant and inspection coverage commitments in the CWA program.
- CWA enforcement responses should be timely, appropriate to the violation and promote a return to compliance.

Most Significant CWA-NPDES Program Issues¹

- CWA inspection report findings and cover letters were ambiguous about compliance determinations made during the inspection. In addition, TDEC is not appropriately reporting Significant Non-Compliance and Single Event Violations.
- TDEC should ensure that enforcement responses promote a return to compliance and escalate to formal actions when non-compliance continues.

Most Significant CAA Stationary Source Program Issues

• The accuracy of data reporting into the database of record needs improvement along with the timeliness of data entry.

Most Significant RCRA Subtitle C Program Issues

• TDEC should make timely determinations of Significant Non-Compliance.

¹ EPA's "National Strategy for Improving Oversight of State Enforcement Performance" identifies the following as significant recurrent issues: "Widespread and persistent data inaccuracy and incompleteness, which make it hard to identify when serious problems exist or to track state actions; routine failure of states to identify and report significant noncompliance; routine failure of states to take timely or appropriate enforcement actions to return violating facilities to compliance, potentially allowing pollution to continue unabated; failure of states to take appropriate penalty actions, which results in ineffective deterrence for noncompliance and an unlevel playing field for companies that do comply; use of enforcement orders to circumvent standards or to extend permits without appropriate notice and comment; and failure to inspect and enforce in some regulated sectors."

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I. Background on the State Review Framework

The State Review Framework (SRF) is designed to ensure that EPA conducts nationally consistent oversight. It reviews the following local, state, and EPA compliance and enforcement programs:

- Clean Water Act National Pollutant Discharge Elimination System
- Clean Air Act Stationary Sources (Title V)
- Resource Conservation and Recovery Act Subtitle C

Reviews cover:

- **Data** completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** identification of violations, determination of significant noncompliance (SNC) for the CWA and RCRA programs and high priority violators (HPV) for the CAA program, and accuracy of compliance determinations
- **Enforcement** timeliness and appropriateness, returning facilities to compliance
- **Penalties** calculation including gravity and economic benefit components, assessment, and collection

EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

EPA builds consultation into the SRF to ensure that EPA and the state understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: FY 2014

Key dates: August 7, 2015: letter sent to the State kicking off the Round 3 review November 2-6, 2015: onsite file reviews for CWA, RCRA and CAA programs

State and EPA key contacts for review:

	Tennessee DEC	EPA Region 4
SRF Coordinator	Chris Moran, Enforcement Coordinator	Kelly Sisario, Enforcement Coordinator
CAA	Kevin McLain, Manager Enforcement Program Division of Air Pollution Control	Mark Fite, Office of Enforcement Coordination Chet Gala, Air, Pesticides & Toxics Management Division
CWA	Jessica Murphy, Manager Compliance & Enforcement Program Division of Water Resources	Ronald Mikulak, Office of Enforcement Coordination Laurie Ireland and Pamela Myers, Water Protection Division
RCRA	Chris Lagan, P.G. Manager, Regulatory Compliance and Enforcement Program Division of Solid Waste Management	Shannon Maher, Office of Enforcement Coordination Alan Newman, Resource Conservation & Restoration Division

III. SRF Findings

Findings represent EPA's conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state's last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue's severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and EPA will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, EPA will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric's SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- Natl Avg: The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- State % or #: The percentage, or if the metric is expressed as a whole number, the count.

Clean Air Act Findings

CAA Element 1 —	Data							
Finding 1-1	Area for State Improvement							
Summary	The accuracy of MDR data reported by TDEC into AFS needs improvement. Discrepancies between the files and AFS were identified in nearly half of the files reviewed.							
Explanation	Metric 2b indicated that 58.8% (20 of 34) of the files reviewed reflected accurate entry of all MDRs into AFS. The remaining 14 files had one or more discrepancies between information in the files and data entered into AFS. The majority of inaccuracies related to duplicate, inaccurate or missing activity data such as FCEs, NOVs, stack tests, etc. Beginning in FY2015, the Agency transitioned to a new national data system known as ICIS-Air. Historical data from AFS was migrated to the new system. In general, incorrect data in the Agency's data system could potentially hinder EPA's oversight and targeting efforts and/or result in inaccurate information being released to the public.							
Relevant metrics	Metric ID Number and Description	Natl Goal		State N	State D	State % or #		
	2b Accurate MDR data in AFS	100%		20	34	58.8%		
State response	 To correct data and prevent future issues, the Division of Air Pollution Control (APC) is taking the following steps: Corrected all 14 errors in ICIS-Air identified during the Round 3 review by February 1, 2016. Will complete review of existing data to address the discrepancies noted by March 31, 2017 as recommended, with the exception of discrepancies due to migration issues that occurred between AFS and ICIS-Air as discussed separately below. Quarterly QA review of the data by the Environmental Consultant 3 in APC's data entry section will begin October 1, 2016. 							

- Enhanced interactive reports for NOVs issued and HPV determinations. Once an NOV or HPV determination is entered into APC's data management system, it is immediately available in the applicable interactive report. This will allow APC to see, and quickly evaluate, an up-to-date summary of data needed to be transferred to ICIS-Air.
- Sought EPA guidance on ICIS-Air data entry by participating in all webinars relating to ICIS-Air modules. APC also sought EPA guidance when APC had questions regarding reporting processes. APC has made a concerted effort to examine the reporting processes for accuracy and learn and adapt to the new data system, including working through data migration issues that may have occurred (see example attached). APC is committed to finding and correcting discrepancies caused by data migration on an ongoing basis.

Recommendation

By March 31, 2017, TDEC should make corrections to existing data to address the discrepancies EPA identified and ensure that in the future, MDRs are accurately entered into ICIS-Air. If by September 30, 2017, EPA determines that TDEC's efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.

CAA Element 1 — Data									
Finding 1-2	Area for State Improvement	Area for State Improvement							
Summary	data associated with other areas (HPVs	Whereas MDR data for stack tests were reported timely into AFS, MDR data associated with other areas (HPVs, compliance monitoring, and enforcement actions) were not always reported timely.							
Explanation	entering MDR data for stack tests into timeframe. However, Metrics 3a2 (16) indicated that HPVs, compliance moni actions were often not entered into AF	Metric 3b2 (93.5%) indicated that TDEC met the national goal in entering MDR data for stack tests into AFS within the specified timeframe. However, Metrics 3a2 (16), 3b1 (81.4%), and 3b3 (77.6%) indicated that HPVs, compliance monitoring activities, and enforcement actions were often not entered into AFS within 60 days, as required by the Information Collection Request (ICR).							
Relevant metrics	Metric ID Number and Description	Natl Goal		State N	State D	State % or #			
	3a2 Untimely entry of HPV determinations	0	•			16			
	3b1 Timely reporting of compliance monitoring MDRs	100%	83.3%	977	1200	81.4%			
	3b2 Timely reporting of stack test dates and results	100%	80.8%	101	108	93.5%			
	3b3 Timely reporting of enforcement MDRs	100%	77.9%	249	321	77.6%			
State response	APC's data entry section created enhancements for the interactive reports for NOVs issued and HPV determinations. Once an NOV or HPV determination is entered into APC's data management system, it is immediately available in the applicable interactive report. This will allow APC to see, and quickly evaluate, an up-to-date summary of data needed to be transferred to ICIS-Air. APC's Enforcement group notifies the Environmental Specialist 5 and the Environmental Consultant 3 in the data entry section via email of all HPV determinations (starting approximately September 2015) and								

	orders issued (starting approximately October 2015). These notifications help ensure timely data entry into ICIS-Air.
	APC is in the process of evaluating the causes of untimely MDR reporting as well as its SOPs and other process documents for revision, if necessary, to address identified issues. APC will provide EPA further documentation regarding these causes and any specific revisions to SOPs or other process documents by March 31, 2017 as recommended.
Recommendation	By March 31, 2017, TDEC should provide documentation to EPA concerning efforts to identify and address the causes of untimely MDR reporting. If by September 30, 2017, EPA determines that TDEC's efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.

CAA Element 2 —	Inspections								
Finding 2-1	Meets or Exceeds Expectations								
Summary	TDEC met the negotiated frequency for inspection of sources, reviewed Title V Annual Compliance Certifications, and included all required elements in their Full Compliance Evaluations (FCEs) and Compliance Monitoring Reports (CMRs).								
Explanation	Metrics 5a and 5b indicated that TDEC provided adequate inspection coverage for the major and SM-80 sources during FY14 by ensuring that each major source was inspected at least every 2 years, and each SM-80 source was inspected at least every 5 years. In addition, Metric 5e documented that TDEC reviewed Title V annual compliance certifications submitted by major sources. Finally, Metrics 6a and 6b confirmed that all elements of an FCE and a CMR required by the Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS Guidance) were addressed in most facility files reviewed.								
Relevant metrics	Metric ID Number and Description	Natl Goal		State N	State D	State % or #			
	5a FCE coverage: majors and megasites	100%	85.7%	174	178	97.8%			
	5b FCE coverage: SM-80s	100%	91.7%	317	317	100%			
	5e Review of Title V annual compliance certifications	100%	78.8%	193	210	91.9%			
	6a Documentation of FCE elements	100%		30	32	93.8%			
	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance 100% 32 32 100%								
State response									
Recommendation									

CAA Element 3 —	CAA Element 3 — Violations								
Finding 3-1	Meets or Exceeds Expectations								
Summary	TDEC made accurate compliance determinations for both HPV and non-HPV violations.								
Explanation	Metric 8a indicated that the HPV disco above the national average of 3.1%. Metric 8c confirmed that TDEC's HPV all 23 files reviewed (100%). In one in state classified a stack test failure as an	Metric 8c confirmed that TDEC's HPV determinations were accurate for all 23 files reviewed (100%). In one instance, the file indicates that the state classified a stack test failure as an HPV, but this was never entered into AFS. This is being addressed under the recommendation for Finding							
Relevant metrics	Metric ID Number and Description	Natl Goal		State N	State D	State % or #			
	7a Accuracy of compliance determinations	100%		31	33	93.9%			
	8a HPV discovery rate at majors		3.1%	11	213	5.2%			
	8c Accuracy of HPV determinations 100% 23 23 100%								
State response									
Recommendation									

CAA Element 4 — Enforcement									
Finding 4-1	Meets or Exceeds Expectations								
Summary		Enforcement actions bring sources back into compliance within a specified timeframe, and HPVs are addressed in an appropriate manner.							
Explanation	Metric 9a indicated that all formal enforcement actions (100%) reviewed brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order. Metric 10b indicated that appropriate enforcement action was taken to address all HPVs (100%) evaluated during the file review.								
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #			
	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe			21	21	100%			
	10b Appropriate enforcement responses for HPVs	100% 14 14 100%							
State response									
Recommendation									

CAA Element 4 —	Enforcement							
Finding 4-2	Area for State Attention							
Summary	About one-fourth of HPVs were not ad	ldresse	d in a ti	mely n	nanneı	•		
Explanation	Metric 10a indicated that 77.1% of the HPVs (54 of 70) addressed in FY14 were addressed within 270 days, which is above the national average of 73.2%. The length of time taken to address untimely HPV actions ranged from 278 to 1302 days. This is a continuing issue from the Round 2 review, although the State has reduced both the number and percentage of overdue actions. For future HPV cases, the state is encouraged to follow the timelines established in the new HPV policy dated August 25, 2014. If an addressing action cannot be achieved within 180 days of day zero, the state should advise EPA Region 4 that it has a "case-specific development and resolution timeline" as required by the new policy and consult at least quarterly with the region until the HPV is addressed.							
Relevant metrics	Metric ID Number and Description 10a Timely action taken to address	Natl Goal		N	State D	State % or #		
State response	Although this is a continuing issue from timely actions has improved and is about increased its staff in the Enforcement staff.	n Rour	nd 2, Al	PC's po	ercenta	age of PC has		
	increased its staff in the Enforcement section to help resolve delays in addressing violations. APC has implemented the HPV timelines outlined in the 2014 HPV policy and has provided training to all staff members. Also, all unaddressed and unresolved HPVs are discussed monthly with Region 4. APC has changed its procedure and organizational responsibility for making HPV determinations and processing these orders. APC is in the process of revising the SOP to address the timely review of potential violations, issuance of a notice of violation, and referral for enforcement actions. The new SOP should be implemented in 2017 and additional training for staff will be conducted.							

			dation	Recommendatio
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CAA Element 5 —	CAA Element 5 — Penalties								
Finding 5-1	Meets or Exceeds Expectations								
Summary		TDEC documented the differences in initial and final penalty and the collection of penalties in their files and data system.							
Explanation	Metric 12a indicated that 18 of 19 penalty calculations reviewed (94.7%) provided documentation in the file showing the rationale for any difference between the initial and final penalty. Metric 12b confirmed that documentation of penalty payments made by most sources (18 of 19) was included in the state's data system.								
Relevant metrics	Metric ID Number and Description	Nati Nati State State % of				State % or #			
	12a Documentation on difference between initial and final penalty	100%		18	19	94.7%			
	12b Penalties collected	100% 18 19 94.7%							
State response									
Recommendation									

CAA Element 5 —	Penalties							
Finding 5-2	Area for State Improvement							
Summary	TDEC's penalty documentation does not include adequate documentation of economic benefit calculations.							
Explanation	Metric 11a indicates that 11 of the 19 penalty actions reviewed (57.9%) provided adequate documentation of the State's consideration of gravity and economic benefit. In some instances, EPA reviewers thought the violations cited probably resulted in some economic benefit, but the file did not contain any economic benefit calculation. In other instances, the state penalty calculation merely showed "\$0" or "NA" for economic benefit, without sufficient rationale for why no economic benefit would have been gained. EPA's expectation that state and local enforcement agencies document the consideration and assessment of both gravity and economic benefit is outlined in the 1993 Steve Herman memo entitled "Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements."							
Relevant metrics	Metric ID Number and Description	Natl Goal		State N	State D	State % or #		
	11a Penalty calculations include gravity and economic benefit	100%	•	11	19	57.9%		
State response	APC proposes that the explanation text indicates that 11 of the 19 penalty action adequate documentation of the State's economic benefit. In some instances, Explications cited probably resulted in some the file did not contain any economic beinstances, the state penalty calculation economic benefit, without referencing. The economic benefit checklist provides benefit would have been gained. EPA checklists provide more detail when no	ons revices requesting the economic requesting considerable constructions and the economic requesting requesting requesting requesting considerable constructions are constructed as a construction of the economic requesting requesting requesting constructions are constructed as a construction of the economic requesting	iewed (eration viewers nimal ecalcular v showe onomic onale for ts futur	of gravethough though though conomition. Ir defended "\$0" benefit results where the confidence of the) proventity and the the ic bench other or "N t check on ic becomic becomes an interesting the province of the provinc	ided d efit, but A" for klist. nomic benefit		

EPA's expectation that state and local enforcement agencies document the consideration and assessment of both gravity and economic benefit is outlined in the 1993 Steve Herman memo entitled "Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements."

APC used the same economic benefit checklist in SRF Round 2, and EPA deemed it acceptable. Round 2 CAA Element 11 Finding stated in pertinent part, "In general, TDEC's penalty documentation includes both gravity and economic benefit calculations." The Explanation section stated in pertinent part, "... and 15 of the 17 (88%) provided sufficient documentation of economic benefit. ... Therefore, the two files that did not address economic benefit appear to be infrequent instances that do not constitute a pattern of deficiencies or a significant problem." Of the 19 files reviewed in Round 3, all but one file included the same type of documentation for economic benefit used in Round 2. APC proposes that EPA change this Finding from Area for State Improvement to Area for State Attention as the practice of APC was predominately the same between Round 2 and 3, yet EPA findings between Round 2 and Round 3 appear inconsistent.

As APC understands the 1993 Steve Herman memo and the 1984 policy on civil penalties referenced in the memo, states have the discretion to not seek de minimis economic benefit (less than \$10,000).

While APC is concerned with what appears to be inconsistent standards applied by EPA staff between two different SRF rounds, APC has revised its economic benefit checklists, starting Federal FY16-17, where no economic benefit is assessed to include an additional detailed explanation of APC's rationale. Additionally, the related penalty memo will address economic benefit by specifically referring to the economic benefit checklist.

Recommendation

By March 31, 2017, TDEC should implement procedures to ensure the appropriate documentation of both gravity and economic benefit in penalty calculations. For verification purposes, for one year following issuance of the final SRF report, EPA will review selected TDEC penalty calculations. If by March 31, 2018, these reviews indicate that the revised procedures are working and the State is documenting the consideration of economic benefit, the recommendation will be considered completed.

Clean Water Act Findings

CWA Element 1 —	CWA Element 1 — Data						
Finding 1-1	Meets or Exceeds Expectations	Meets or Exceeds Expectations					
Summary	TDEC exceeded National Goals for the entry of key data metrics for major facilities.						
Explanation	Metrics 1b1 and 1b2 measure TDEC's data entry of permit limits and DMRs for NPDES major facilities into Integrated Compliance Information System (ICIS), EPA's national database. TDEC exceeded National Goals and the National Averages for the entry of permit limit data (Metric 1b1) and DMR data (Metric 1b2) for major facilities into ICIS. Issues with Data Metrics (7a1) are discussed in Element 3.						
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	
	1b1 Permit limit rate for major facilities	<u>></u> 95%	91.1%	148	154	96.1%	
	1b2 DMR entry rate for major facilities	<u>></u> 95%	96.6%	4126	4126	100%	
State Response	The State strives to maintain 100% cor DMRs for the major facility universe a concurs with this assessment.		•	-			
Recommendation							

CWA Element 1 —	- Data					
Finding 1-2	Area for State Attention					
Summary	The accuracy of data between files review national data system had minor discrepance		data re	flected	d in th	e
Explanation	Metric 2b indicated that 75% of the files reviewed reflected accurate data entry into ICIS. The few discrepancies observed between ICIS and the State's files were relatively minor and were related to inspection dates, Discharge Monitoring Report (DMR) parameters, and enforcement actions. EPA understands that TDEC manually enters DMR and enforcement data into ICIS. The discrepancies do not appear to reflect a systemic problem and were promptly corrected once brought to the state's attention. Until the flow of data from the state database into ICIS is automated, TDEC should take steps to ensure accurate data entry into ICIS.					
Relevant metrics	Metric ID Number and Description 2b Files reviewed where data are accurately	Natl Goal	Natl Avg	State N	State D	State % or #
	reflected in the national data system	100%		24	32	75%
State Response	The State does not currently have the electronic data flows in place that would be necessary to ensure that all the data in ICIS matches the data in the state system. As noted above, this data is currently manually entered into two separate databases. The State is working to upgrade our Windson node and the coding in our database necessary to create electronic data flows between the two systems. During the implementation phase, the State has instituted interim procedures to streamline the data entry process and ensure accuracy. The State has expanded the number of ICIS users during the past two years to include field staff in each office so that the inspector who conducts the inspection is also the person entering the inspection. This should help ensure that the results of the inspection are correctly entered into the system. An additional interim measure that has been initiated to ensure data accuracy in both systems, is a monthly inspection report generated from the central office and sent out to the EFC staff listing any inspections that are not in both databases or appear to be duplicated, so that any reporting errors can be quickly identified and corrected. Once the flows are functional for the inspection module				ata in ered indsor ata the erocess ers the eroces are t has	

	duplicate entries will be eliminated. The State anticipates having the flows for the inspection module operational by the December 21, 2016, deadline set forth in the e-reporting rule.
Recommendation	

CWA Element 2 —	CWA Element 2 — Inspections							
Finding 2-1	Area for State Improvement							
Summary	(CMS) Plan and CWA §106 Wo	TDEC did not meet a couple of its FY14 Compliance Monitoring Strategy (CMS) Plan and CWA §106 Workplan inspection commitments. Exceptions included CSO inspections and inspections of non-majors with general permits.						
Explanation	Element 2 includes metrics that measure planned inspections completed (Metrics 4a1 – 4a10) and inspection coverages (Metrics 5a1, 5b1, and 5b2) for majors and non-majors. The National Goal for this Element is for 100% of state specific CMS Plan commitments to be met.							
	Metrics 4a indicated that TDEC met seven out of eight FY14 inspection commitments. For Metric 4a8 (Industrial Stormwater Inspections) and Metric 4a9 (Phase I & II SW Construction Inspections), TDEC exceeded the inspection commitments by completing 186 and 201 additional inspections, respectively. The inspection commitment not met was Metric 4a4 (CSO Inspections). The CMS requires inspection of 100% of the TN CSO universe (three facilities) every three years. TDEC did not conduct any CSO inspections from FY12-FY14. In FY15, TDEC conducted one CSO inspection.					and ceeded l Metric he TN onduct		
	Metric 5 indicated that TDEC met two out of three FY14 inspection coverage commitments for NPDES majors/non-majors. The inspection coverage not met was Metric 5b2 (Inspection coverage of non-majors with general permits). This NPDES non-majors with general permit universe includes municipal and industrial wastewater facilities.					ction ors with		
	Meeting inspection commitments and inspection coverages were an Area for State Attention in Round 2 of the SRF and due to continued commitment shortfalls, is an Area for State Improvement in Round 3.							
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #		
	4a1 Pretreatment compliance inspections and audits	100% of CMS		PAI: 18 PCI: 42	PAI:18 PCI: 41	PAI: 100% PCI: 102%		

4a2 SIU inspections for SIUs discharging to non-authorized POTWs	100% of CMS	 2	2	100%
4a4 Major CSO inspections	100% of CMS	 0	3	0%
4a5 SSO inspections	100% of CMS	 3	0	-
4a7 Phase I & II MS4 audits or inspections	100% of CMS	 16	16	100%
4a8 Industrial stormwater inspections	100% of CMS	 414	228	180%
4a9 Phase I & II SW construction inspections	100% of CMS	 1,178	977	120%
4a10 Medium and large NPDES CAFO inspections	100% of CMS	 6	3	200%
5a1 Inspection coverage of NPDES majors	100% of CMS	 87	83	105%
5b1 Inspection coverage of NPDES non- majors with individual permits	100% of CMS	 160	135	118%
5b2 Inspection coverage of NPDES non- majors with general permits	100% of CMS	 58	77	75%

State Response

The State disagrees that inspection coverage is an area in need of State Improvement. The combined sewer overflow (CSO) inspections that were not completed are a very small subset of the universe, as there are only 3 facilities in the entire state. Additionally this item has already been corrected as the two field offices, which have CSO facilities have been instructed to complete at least one CSO inspection every time the facility is inspected which will ensure that 100% of the CSO inspections are completed according to the required time frames. Likewise, staff have been notified and trained in the requirement to conduct SSO inspections. It is very likely that sanitary sewer overflow inspections were conducted as part of normal compliance evaluation inspections but not always identified as a separate inspection. As with the CSO inspections, staff have been trained in the need to perform SSO inspections at a minimum frequency of 10% per year, and in meeting the non-major NPDES with general permits. Neither CSO nor SSO inspections should be below the required frequency going forward. The State believes that through staff training, this area of deficiency has already been addressed. The remainder of the inspection types all met or exceeded the minimum requirements set forth by EPA. The State was obligated to conduct approximately 1,524 total inspections and completed a total of approximately 1,924 inspections, or 126% of our numerical goal. While the State did miss 22 inspections in 2 categories, overall the State did meet its numerical inspection commitment. Therefore,

	the State requests that this item be changed to area for attention versus area for improvement.
Recommendation	By March 31, 2017, TDEC should implement procedures to ensure that CWA 106 Workplan inspection annual commitments and CMS established inspection frequencies are met and maintained. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that the state is on target to meet its annual commitments and the CMS inspection frequencies, the recommendation will be considered completed.

CWA Element 2 —	Inspections					
Finding 2-2	Meets or Exceeds Expectations	Meets or Exceeds Expectations				
Summary	TDEC's inspection reports were well written, complete and provided sufficient documentation to determine compliance.					
Explanation	Metric 6a requires that inspection reports are complete and sufficient to determine compliance at a facility. 100% of TDEC's inspection reports and accompanying cover letter were well written, complete, sufficient and included field observations noting compliance issues, where appropriate.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	6a Inspection reports complete and sufficient to determine compliance at the facility	100%		26	26	100%
State Response	The State concurs with this assessment.					
Recommendation						

CWA Element 2 —	- Inspections					
Finding 2-3	Area for State Attention					
Summary	TDEC inspection reports were not always of	ΓDEC inspection reports were not always completed in a timely manner.				
Explanation	File Metric 6b indicated that 7 of the 27 (26%) of TDEC's inspection reports were not completed in a timely manner. Because TDEC's EMS does not prescribe timeframes for inspection report completion; EPA relied on its NPDES EMS which allows for 30 days and 45 days to complete non-sampling inspection reports and sampling inspection reports, respectively. The average number of days to complete an inspection report was 25 days, with a range of 4-61 days. The seven untimely inspection reports were completed within 41-61 days, which is an improvement from Round 2 of the SRF when the untimely inspection reports took an average of 84 days for completion. TDEC should reassess their practices and procedures to ensure the timely completion of inspection reports. TDEC also has the ability to establish their own timeframes for inspection report completion. Because nearly three-fourths of the reports reviewed were completed in a timely manner pursuant to the EPA's EMS and the decrease in the number of days needed for completion from Round 2, this does not appear to reflect a systemic problem. Timeliness of inspection reports is a continuing issue from Round 2 of the SRF and remains an Area for State Attention in Round 3.					
Relevant metrics	Metric II) Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	6b Inspection reports completed within prescribed timeframe	100%		20	27	74%
State Response	Completion of inspection reports within the that is currently included in job plans for in our guidance documents for staff. Some of exceeded the time frame were particularly additional time to complete. The State's 100 provision for the reports to be completed w State's interpretation of that language, the State's	the in complete of the complet	ors and aspection lex auditalex languages 45 days.	is alson repo ts that ge alson Acco	inclurts that required including	nded in at ired udes a to the

	completion of inspections instead of 74%. Additional training will be given to staff who conduct the inspections, to stress the importance of completing the inspection reports on time. The State will also reassess the amount of time prescribed in our guidance documents to ensure that the time-frames are all in agreement and meet EPA's requirements.
Recommendation	

CWA Element 3 —	CWA Element 3 — Violations					
Finding 3-1	Area for State Improvement	Area for State Improvement				
Summary	Inspection Report findings and cover letter compliance determinations made during to			ar abo	ut the	
Explanation	Metric 7e indicated that 35% of the inspection report findings and cover letters were ambiguous about the compliance determination made at each facility. While the inspection reports reviewed would detail deficiencies, it did not explicitly state that the findings were violations. For example, one file noted that deficiencies of permit conditions were observed during the inspection. Instead of clearly indicating the deficiencies were violations, the report mentioned the facility should ensure compliance with their NPDES permit. In instances where SSOs or DMR exceedances were documented, a follow-up NOV was not issued in association with those inspection findings.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	7e Inspection reports reviewed that led to an accurate compliance determination	100%		17	26	65.4%
State Response	In many of the files reviewed, the inspection report is also the NOV. While not all NOVs contain a heading stating that the inspection is a NOV, the report does contain language identifying that a violation has occurred and needs to be corrected. Going forward, the State will issue guidance to field staff clarifying when to identify letters as NOVs. Previous discussions with EPA in 2011 indicated that it would not be a problem if the title NOV was not used in all circumstances, as long as the violation was identified in the body of the letter. The State will send updated guidance documents to EPA as they are developed. The State anticipates that this will be completed by the end of 2016.					
Recommendation	By March 31, 2017, TDEC should implement procedures to clarify the compliance status of a facility following inspections. Notice of Violations should be issued for facilities found to be non-compliant during the					

inspection. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that compliance determinations are clearly made and NOVs are issued when appropriate, the recommendation will be considered completed.

CWA Element 3 —	- Violations						
Finding 3-2	Area for State Improvement	Area for State Improvement					
Summary	• • • • • • • • • • • • • • • • • • • •	The State does not identify and properly report Single Event Violations (SEVs) and Significant Noncompliance (SNCs) at major facilities.					
Explanation	SEVs are one-time or long-term violations, including unauthorized bypasses or discharges, discovered by the permitting authority typically during inspections and not through automated reviews of Discharge Monitoring Reports.						
	Metric 7a1 indicated that TDEC entered only one SEV at a major facility in FY14. One inspection report documented violations, but the file does not indicate that the State entered them as SEVs in ICIS.						
	Metrics 8b1 and 8c indicated that the State did not properly code SEVs into ICIS as required by the ICIS SEV Entry Guidance and did not identify any SEVs as SNC in any of the files reviewed. In each of the nine files reviewed, numerous bypasses and SSOs were documented, but were not identified in ICIS as SEVs or SNC, where appropriate. When SSOs are reported on a DMR, TDEC entered them as a DMR parameter into ICIS.						
	In Spring 2016, EPA Region 4 gave ICIS training to TDEC and discussed solutions for reporting bypasses and SSOs in accordance with the ICIS SEV Entry Guidance.						
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	
	7a1 Number of major facilities with single event violations	N/A				1	
	8b1 Single-event violations accurately identified as SNC or non-SNC	100%		0	9	0%	
	8c Percentage of SEVs identified as SNC reported timely at major facilities	100%		0	7	0%	
State Response	The State disagrees in part with this finding are currently tracked on the DMR form an Additional entry of these overflow and by	nd self	-report	ed by t	he fac	cility.	

unreasonable burden on the state and duplicate data already in the system. Current language in the 106 commitment (Item 15) states: "Enter and maintain data in ICIS-NPDES for all Single Event Violations, except those automatically identified by the system (e.g., if DMR data entered, effluent violations need not be identified as SEV)". Based upon TDEC's interpretation of that language, the State was meeting this requirement for both majors and minors in regards to capturing overflows and bypasses in the ICIS system during this review period.

EPA provided the State training during April of 2016 on entry of SEVs. Field office staff also attended this training as they will be doing the SEV entry related to inspections going forward. Following the EPA training in April, SEVs were again discussed at the quarterly May enforcement roundtable with field office staff to ensure that everyone understands how to enter these violations and when they should be entered. As with the inspection report entry, a monthly report on SEVs will be sent to field office managers until data flows are established to ensure that SEVs are properly entered into both the state system and ICIS. Once the data flows are in place to support e-reporting this will help field staff in reducing their data entry burden by eliminating the need for double data entry.

Additionally, the division has held several meetings to update our overflow and bypass language so that more information can be captured in ICIS as well as update the coding as permits are reissued, so that self-reported overflows and bypasses that reach waters of the state are automatically identified as SNC in ICIS and in ECHO. The State believes that these actions will correct any reporting deficiency that may exist.

Recommendation

By March 31, 2017, TDEC should develop and implement procedures to ensure that SEVs are identified and coded accurately into ICIS. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that SEVs are being identified and coded accurately, the recommendation will be considered completed.

CWA Element 4	— Enforcement
Finding 4-1	Area for State Improvement
Summary	The State's Enforcement Responses (ERs) were not always timely or appropriate. Additionally, the State's ERs did not always achieve a Return to Compliance (RTC).
Explanation	The State's Enforcement Responses (ERs) were not always timely or appropriate. Additionally, the State's ERs did not always achieve a Return to Compliance (RTC). Metric 9a indicated that in 10 of 23 files reviewed (44%) the chosen ERs did not return or were not expected to return a facility to compliance. In several instances, an NOV was issued without a deadline for the facility to respond with a corrective action plan and further noncompliance continued, as documented by ICIS. In other files, despite the issuance of an NOV with a deadline for a facility to respond with a corrective action plan, continued noncompliance occurred and an apparent RTC was not achieved. Metric 10a1 indicated that none of the State's 12 major facilities in SNC had timely ERs. Metric 10b documented that in 50% of the files reviewed, TDEC did not consistently address violations in an appropriate manner. In those 12 files, the ERs were not appropriate because numerous informal enforcement actions were taken and noncompliance appeared to continue without ER escalation to achieve compliance, or the State did not provide written justification for why a formal action was not taken for facilities in SNC. For example, one facility was issued five NOVs in seven months of SNC violations without any ER escalation or documentation for why formal enforcement action was not taken. Another file reviewed had ten months of Category 1 effluent exceedances without a documented ER or justification for why an enforcement action was not taken. Additionally, multiple files documented informal actions with no apparent RTC or documentation for why formal action was not taken. While issuance of an NOV may be the appropriate initial response to promote compliance, ER escalation is warranted when repeated violations occur to ensure a RTC.

Timely and appropriate enforcement responses are a continuing issue from Rounds 1 and 2 of the SRF and remains as an Area for State Improvement in Round 3.

Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
9a Percentage of enforcement responses that return or will return source in violation to compliance	100%		10	23	44%
10a1 Major facilities with timely action as appropriate	<u>></u> 98%	9%	0	12	0%
10b Enforcement responses reviewed that address violations in an appropriate manner	100%		12	24	50%

State Response

The facilities that were used for the review are generally large wastewater plants or industrial plants. These facilities may continue to have violations while under an order that continue to place them in significant noncompliance (SNC). Corrective actions at these facilities often take several years to complete. Overall the state's SNC compliance rates among major facilities have improved significantly as the SRF dashboard shows. The number of major facilities listed as being in SNC for 2012 and 2013 show that there were 54 and 51 facilities in SNC, while 2014 and 2015 show a dramatic improvement in SNC compliance rates with 29 facilities listed in 2014 and 26 facilities listed in 2015. Therefore the State disagrees with the findings 9(a) and 10(b). Further, the State believes that the improvement shown in the metrics above is attributable to the enforcement actions taken over a period of many years which have resulted in numerous facilities upgrading, expanding, and in some cases building new treatment facilities. Also of note, out of the 26 shown to be in SNC during 2015, 18 of those have either had orders, or are currently under an order. The remainder are in development, or are in negotiations to sign a consent order. Many of the SNC violations occurred during the time that a facility was under an order and required no additional enforcement, as was the case with the examples mentioned above. The facility with numerous NOVs was under an order at the time, and completed the actions in the approved CAP in June of 2016. In other examples where an escalated enforcement response was recommended, the State was already working on new orders which had not been finalized at the time of the SRF inspection. The State will work to further document in writing our rational for enforcement responses going forward. The 44% rating for enforcement does not reflect the improvement

shown in major SNC compliance rates over the past few years. The phrase "responses that returned, or will return" a facility to compliance could allow additional consideration for those facilities that are under an order or have an order in development. In the past EPA has taken this into consideration. Another consideration that should be taken into account is the fact that the State does not change permit limits while a facility is under an order as many other states routinely do. Therefore, the compliance rate may appear worse when compared to other states that do allow interim enforcement limits.

The State recognizes that the orders issued have not met the timeliness definition as set forth by EPA. However, the State would like to point out that the overall national average of timely enforcement nationwide was only 4% in 2012 reaching a high of only 14% in 2015, (or 9% according to the chart above), as reported in the EPA ECHO database on the State Review Framework.

The State is working to improve timeliness through ongoing training of staff and streamlining of procedures to initiate enforcement actions within the division. Some of the actions taken to date include a modified LEAN event to identify areas where processes could be shortened and review times decreased, as well as ongoing training initiatives to facilitate staff understanding of enforcement procedures.

Recommendation

By March 31, 2017, TDEC should develop and implement procedures to ensure that ERs are timely and appropriate, achieve a RTC, and are documented in the file. Should TDEC update their EMS, EPA will review and provide comments for consideration. EPA will review these procedures and monitor the State's implementation efforts through existing oversight calls, review of the Quarterly Non-Compliance Report, and other periodic data reviews. If by September 30, 2017, these reviews indicate that the revised procedures appear to result in timely/appropriate enforcement responses that reflect a RTC; the recommendation will be considered completed.

CWA Element 5 —	- Penalties								
Finding 5-1	Area for State Improvement								
Summary	The State does not routinely include documentation in the file that demonstrates the consideration of economic benefit (EB).								
Explanation	Metric 11a indicated that two of eight (25%) files reviewed documented the consideration of EB. In six files, TDEC did not mention EB or document the rationale for why EB related to delayed or avoided costs was not included in the penalty calculation worksheet. The State's "Uniform Guidance for the Calculation of Civil Penalties" makes it clear that to the extent practicable, the EB of noncompliance should be calculated and recovered. TDEC's Uniform Guidance also states that "to effectively achieve deterrence, any significant economic benefit resulting from the failure to comply with the law should be recovered." TDEC also developed an EB model based on EPA's BEN model. In support of considering EB in penalty calculations, EPA guidance (Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements; 1993) notes that to remove economic incentives for noncompliance and establish a firm foundation for deterrence, EPA, the States, and local agencies shall endeavor, through their civil penalty assessment practices, to recoup at least the economic benefit the violator gained through noncompliance. Documentation of economic benefit consideration in penalty calculations is a continuing issue from Rounds 1 and 2 of the SRF and remains as an								
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #			
	11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%		2	8	25%			
State Response	The uniform penalty guidance that the Sta "gravity" and economic benefit in each ca worksheet that the State is currently using	ase. Th	is is do	cumen	ted in	the			

that were reviewed during the past SRF review period did not have this documentation, as it was still in development at the time. The current worksheet also includes an area to document economic benefit if it is reasonable to do so, and a checklist describing areas where an economic benefit could be assessed as well as a space to document why an economic benefit was not assessed. This is now mandatory for all enforcement staff to fill out. Additional training is being provided to staff to ensure that the economic benefit checklist is filled out appropriately for each case and enforcement staff received training on use of the TN BEN model during a staff meeting in June of 2016. The State will be happy to provide EPA with any orders and penalties that are requested.

Recommendation

By March 31, 2017, TDEC should consistently implement procedures which document the consideration of EB and gravity in their penalty calculations. EPA will monitor the State's efforts through existing oversight calls and other periodic file reviews. For verification purposes, EPA will review finalized TDEC orders and penalty calculations, to assess progress in implementation of these improvements. If by September 30, 2017, these reviews indicate that the State is documenting the consideration of gravity and EB; the recommendation will be considered completed.

CWA Element 5 —	- Penalties					
Finding 5-2	Area for State Improvement					
Summary	The difference and/or the rationale for an final penalties assessed are not consistent					
Explanation	Metric 12a indicated that six of nine (67% difference between the initial and final pedifference.					
	As described in TN's "Uniform Guidance Penalties," TDEC may assess a civil penalty relief conditions outlined in an Order. The that "the upfront civil penalty should rembenefit" and should "encourage compliant cost more than compliance." Of the three difference and/or the rationale for difference penalties assessed, the following observate. No documentation of rationale where worksheet amount does not match the penalties documented in the Agreed. The final upfront penalty does not responsible. (2 files). When an assessed penalty is 100% of compliance is not greater than compliance is not greater than complementary collected. Subsequent to the file rechanged their procedures to only enter the ICIS.	compose Uniform over an ce by had files the cess begins when the inner final Order contingulations. The contingulation is alty (up tely review,	t consistent such a consistent	ts of a abject idance in economot do nitial ed: nalty of t/cont s) d economot cost of cost of cost of stated	an "up to inju also nomic omplia cumer and fi calcula ingent nomic of non ntinge	front" unctive states unce nt the nal ation t
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	12a Documentation of the difference between initial and final penalty and rationale	100%		6	9	67%

State Response

The example case where 100% of the penalty was contingent is unusual and is no longer occurring. All NPDES cases that are currently issued by the State have a percentage of the penalty as an up-front requirement, which covers any economic benefit gained through non-compliance. In cases where the Respondent is offered a SEP to offset a portion of the up-front penalty, the Respondent must still pay any amount of economic benefit in cash and our SEP policy requires the SEP to be at least twice the cost of the offset penalty amount. Our state database also has a separate area to track the amount of money required to be spent on a SEP versus the total amount that was actually spent. This is currently being documented for each order that contains a SEP.

The majority of orders that the State issues include minimum up-front penalties of 15-25% of the total calculated penalty, and recover substantially more than the economic benefit. This guidance will be reiterated and clarified in ongoing training and in any updated guidance documents.

The State was originally instructed to enter the entire amount of the penalty into the PCS/ ICIS system many years ago. Upon learning that EPA would prefer to have only the up-front amount of the penalty entered, the State immediately changed entry procedures to comply with EPA recommendations.

The total penalty amount is a reflection of the amount calculated for all of the violations covered by the order. The up-front amount is the amount that the State initially collects once the order is final. If the Respondent complies with the order then the contingent penalties are not due. However, if the Respondent fails to comply with the contingent requirements, then the amounts automatically become due and payable to the State without the need for additional orders or further legal action.

While this method differs from the way EPA assesses penalties, the State has been advised by the Office of the Attorney General that we cannot issue penalties for stipulated penalties except in an Order by Consent. The current penalty allocation between up-front and contingent penalties provides deterrence for failing to comply with order requirements while still imposing a significant monetary penalty upon the Respondent.

	The State will be happy to provide EPA with any orders and penalties that are requested.
Recommendation	By March 31, 2017, TDEC should implement procedures to ensure consistency in the use of the Uniform Guidance and that economic benefit is recovered. The state should also ensure that only upfront penalty amounts assessed are entered into ICIS. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. For verification purposes, EPA will review finalized TDEC orders and penalty calculations to assess progress in implementation of these improvements. If by September 30, 2017, these reviews indicate marked improvement in these areas, the recommendation will be considered completed.

CWA Element 5 —	- Penalties							
Finding 5-3	Area for State Attention							
Summary	The State does not consistently document the collection of penalties.							
Explanation	Metric 12b indicated that seven of nine (78%) files reviewed documented the collection of upfront penalties within the state database and that contingent penalties milestones were met. Several files reviewed contained Supplemental Environmental Projects (SEPs) that offset the upfront penalties. Of the two files that did not document penalty collection, one was referred to collections following the SRF and the other file had a 100% contingent penalty, but was unclear if the facility met the contingency milestones. Because the majority of the files documented penalty collection, this does not appear to reflect a systemic problem. In instances where SEPs are used to offset a portion of the penalty or where contingent penalties are used, TDEC should implement procedures to ensure proper documentation that SEPs have been completed and contingent milestones have been met.							
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State	State D	e State % or #		
	12b Penalties collected	100%		7	9	78%		
State Response	The State currently uses our database to track collection of penalties. Of the two cases in question, one is currently with collections and the other one has been paid. The SEP documentation was in our database but not necessarily in the paper file as the process is maintained in an electronic format. In an effort to better document completion of items required in orders, we have started including a final report requirement when SEPs are used, and a final report documenting all completed requirements and analyzing the effectiveness of those corrective actions. This will be a standard component of orders going forward that require corrective actions that will take multiple years to complete. See also comments in item 5-2 above.							
Recommendation								

Resource Conservation and Recovery Act Findings

RCRA Element 1 -	— Data								
Finding 1-1	Area for State Attention								
Summary	During the SRF evaluation, the majority of the files reviewed included accurate data.								
Explanation	During the SRF file review, information in the facility files was checked for accuracy with the information in the national RCRA database, RCRAInfo. The data was found to be accurate in 26 of the 32 files (81.3%). The data inaccuracies found were isolated, like incorrect dates, missing Notices of Violation, or incorrect violation citations. Unlike previous SRF evaluations, the problems did not appear to be systemic and can be monitored at the state level. However, since there has been staff turnover TDEC should consider retraining the employees on their data SOP and RCRAInfo data entry requirements. This element considered an Area for State Attention.								
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #			
	2b Complete and accurate entry of mandatory data	n/a	n/a	26	32	81.3%			
State Response	The DSWM concurs that the accuracy rate is unacceptable and that steps need to be taken to improve it. The Division plans on having a retraining session at the Statewide Staff meeting in October 2016 to address the need for staff to input information accurately and completely into RCRAInfo. This will also be addressed at the semi-annual manager's meeting to be held in August 2016. The Enforcement and Compliance Section will begin randomly cross-checking information in the facility files against the information in RCRAInfo as a Quality Assurance measure. The Division will look at the feasibility of adding a Quality Control step to the Field Office Manager's job duties. Currently it is difficult to add a centralized system-wide QC check due to system configuration.								
Recommendation									

RCRA Element 2 —	- Inspections									
Finding 2-1	Meets or Exceeds Expectations									
Summary	Tennessee met national goals for all TSD and LQG inspections.									
Explanation	Element 2 measures three types of required inspection coverage that are outlined in the EPA RCRA Compliance Monitoring Strategy: (1) 100% coverage of operating Treatment Storage Disposal (TSD) facilities over a two-year period, (2) 20% coverage of Large Quantity Generators (LQGs) every year, and (3) 100% coverage of LQGs every five years. In FY 2014, Tennessee met expectations for all inspections in these areas. All 21 operating TSDs were inspected over the two-year time period. The state also had excellent annual LQG inspection coverage (30.7%) that is well above the national goal of 20%. For the five-year LQG inspection coverage, the initial data metric of 87.8% was below the national goal of 100%. Upon reviewing the facilities that were not inspected during this five-year time frame, it was noted that 28 of the 41 facilities were not LQGs during the entire five years and therefore are not part of the inspection universe. The corrected universe would then be 295 of 308 LQGs that were inspected in the five-year period, which is 95.7% coverage. This LQG inspection coverage is proximate enough to the national goal of 100% coverage to allow for fluctuation of LQG status over the five-year period.									
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #				
	5a Two-year inspection coverage of operating TSDFs	100%	88.4%	21	21	100%				
	5b Annual inspection coverage of LQGs	20%	20.1%	103	336	44.2%				
	5c Five-year inspection coverage of LQGs	100%	67.1%	295		87.8%				
	Five-year inspection 5c Corrected of LQGs			295	308	95.7%				
State Response	EPA's RCRA Compliance Monitoring Stinspection coverage of Large Quantity Go coverage every year and 100% coverage Tennessee facilities were not LQGs during after making corrections for this, EPA no Framework (SRF) that during this five-year	eneratorevery to the other	ors (LQ five year entire 5 the Stat	Gs) is irs. So year p e Revi	20% me eriod ew	and				

	this close enough to the national goal that this metric is considered to
	meet expectations. That said, TDEC feels that this number is too low
	and has evaluated the program and has taken steps to improve inspection results. Upon investigation, it was determined that the shortage of LQG inspections largely occurred in the Nashville Field Office (NFO) and can be attributed to legacy issues that occurred over several years. Procedural modifications in the way LQG inspections are assigned and monitored have been developed and implemented in the last two years by the manager of the NFO. These operational changes will improve the metrics with the goal of achieving the national target
	of 100% coverage of LQGs every five years.
Recommendation	

RCRA Element 2 –	— Inspections									
Finding 2-2	Meets or Exceeds Expectations									
Summary	The RCRA inspection reports provided sufficient documentation to determine compliance at the facility, and were completed in a timely manner.									
Explanation	A total of 32 inspection reports were evaluated for completeness and sufficiency to determine compliance with the RCRA requirements. It was found that 100% of the inspection reports met this standard. The <i>Tennessee Division of Solid Waste Management Hazardous Waste Program Enforcement Policy</i> sets forth a 45-day deadline for RCRA inspection report completion. Thirty-one inspections reports (96.9%) inspection reports met this deadline with an average time for report completion at 29 days. The completeness, sufficiency, and timeliness of the RCRA inspection reports meets SRF requirements. The quality of the TDEC RCRA inspection reports reviewed were excellent, with thorough descriptions of facility processes, waste management activities, potential violations									
	and supporting photo documentation.									
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #				
	6a Inspection reports complete and sufficient to determine compliance	100%	n/a	32	32	100%				
	6b Timeliness of inspection report completion	100%	n/a	31	32	96.9%				
State Response	TDEC appreciates EPA's acknowledgem Management Program's efforts to focus of									
Recommendation										

	– Violations								
Finding 3-1	Meets or Exceeds Expectations								
Summary	Tennessee makes accurate compliance determinations and the appropriate identification of most SNC facilities.								
Explanation	File Review Metric 7a assesses whether accurate compliance determinations were made based on a file review of inspection reports and other compliance monitoring activity (i.e., record reviews). The file review indicated that 96.9% of the files reviewed had accurate compliance determinations (31 of 32 files). The majority of SNCs (90.5%) were identified correctly by the state in the national database and in accordance with the RCRA ERP. Of the 21 SNC-caliber facility files reviewed, there were two facilities that were not identified as SNCs by the state, and violations were addressed through informal rather than formal enforcement actions per the RCRA ERP. The accuracy of the state's RCRA compliance determinations and the appropriateness of the SNC identifications meet SRF requirements.								
Relevant metrics	-		NJ - 41	Gt t					
Reievant metries	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #			
Reievant metries	Metric ID Number and Description 7a Accurate compliance determinations								
Activant metrics		Goal		N	D	% or #			

be better able to address the problem at the source. Alan Newman (EPA) was made aware at the time, and a copy of our warning letter was sent to Missouri. In addition, the new owner (Central Transport) gave the Division a copy of procedures that should prevent another similar situation from ever occurring. Since Vitran-Memphis/Central was considered to be an innocent party to Vitran-Missouri's actions, DSWM believes that enforcement action is most appropriately taken against Vitran-Missouri.

Excel:

• Excel is a Treatment Storage and Disposal (TSD) facility that is subject to annual inspections. A CEI was performed on March 26, 2014 which identified violations associated with secondary containment integrity. Then on July 17, 2014 Excel notified the State of the shipment of Hazardous Waste (HW) to a Class 1 (Subtitle D) landfill. Excel immediately cleaned up the HW at the landfill. An NOV was issued on September 4, 2014 for the shipment of HW to a Class 1 landfill. A show cause meeting was held on October 8, 2014 to discuss the violations associated with the March 26, 2014 CEI as well as the September 4, 2014 NOV. The facility submitted information (PE certification) after the October 8, 2014 show cause meeting regarding the structural integrity of the secondary containment and sump structure to support their contention that they were sound and not leaking. The decision was made by the DSWM to not pursue formal enforcement action for the 2014 inspection and September 4, 2014 NOV (for secondary containment structural integrity and for mishandling HW). Instead a warning letter was issued to the facility. Subsequent TDEC/EPA joint inspections identified additional violations; EPA is taking the enforcement lead for these issues.

Recommendation

RCRA Element 3 –	– Violations									
Finding 3-2	Area for State Improvement	Area for State Improvement								
Summary	The timeliness of SNC determinations continues to be an issue for the Tennessee RCRA program.									
Explanation	The RCRA ERP outlines that 100% of SNC determinations should be entered into RCRAInfo within 150 days of the first day of the inspection (day zero). The data metric that measures this requirement indicated that only 52.3% (11 of the 21) SNCs identified met this criterion in FY2014. The initial metric was 47.8% (11 of 23 SNCs timely), but two of the cases were EPA joint inspections so those SNCs were removed from the metric.									
	As outlined in the <i>Tennessee Division of Solid Waste Management Hazardous Waste Program Enforcement Policy</i> , the TDEC Field Office submits an "Enforcement Action Request" (EAR) to the Division's Enforcement Section if the potential for a formal enforcement action is identified. Enforcement personnel then evaluate the merits of the case, typically through a show-cause meeting with the facility representatives. If there is a decision to pursue formal enforcement then the facility is identified as a SNC in RCRAInfo.									
	In evaluating the case timelines, EPA observed that in nine of the ten untimely SNCs (90%), the EAR was submitted to the Enforcement Section more than 100 days after the inspection. The Division's policy states that the field offices should submit an EAR within 75 days of first documenting the violation (inspection reports average 29 days for completion). The delay in EAR submittals was also identified as a factor in late SNC determinations during the SRF Round 2 evaluation. This issue will continue as an "Area for State Improvement" in SRF Round 3.									
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #				
	8b Timeliness of SNC determinations 8b Corrected Timeliness of SNC determinations	100%		11 11	23 21	47.8% 52.3%				
State Response	The Division of Solid Waste Management and tracking each Enforcement Action Reand Reporting Excel spreadsheet for each inspection date (day zero), NOV issuance will be required to be entered for all facility	equest (Field (date, a	EAR) Office. nd EA	in the Facilar R sub	Plan ity na mitta	ning ame, al date				

calculate the number of days from the inspection date (day zero) to the NOV issuance date and the EAR submittal date. If 45 days is exceeded from inspection date (day zero) to the NOV issuance date it will be flagged with a NO. If 75 days is exceeded from inspection date (day zero) to the EAR submittal date it will be flagged with a NO. This additional reporting and tracking will reemphasize the importance of meeting these NOV and EAR time limits and will provide management with an easy mechanism to track compliance with the established time limits. Non-compliance with the above timeframes will be discussed with Field Office Managers during formal performance reviews.

Additionally, at the August 2016 meeting for all Division of Solid Waste Management managers, a member of the Enforcement and Compliance staff will conduct refresher training on which violations and situations which necessitate the submittal of an EAR.

Recommendation

EPA will monitor progress on meeting the timelines for SNC entry into RCRAInfo via bimonthly conference calls and RCRAInfo data analyses. Following the finalization of the TDEC Round 3 SRF Report, EPA will close this recommendation after observing four consecutive quarters of performance that meets national goals.

RCRA Element 4 —	- Enforcement									
Finding 4-1	Meets or Exceeds Expectations									
Summary	TDEC consistently issued timely RCRA enforcement responses that returned violating facilities to compliance.									
Explanation	A total of 29 files were reviewed that included informal or formal enforcement actions, and of the enforcement actions returned the facilities to compliance with the RCRA requirements. The data metric that measures the timeliness of formal enforcement showed that 94.7% (18 of 19) of the formal enforcement actions met the									
	ERP in FY 2014. The national goal is 80%. This is a significant improvement from previous SRF reviews. Facility noncompliance was documented in the 29 of the files reviewed. In evaluating the enforcement responses taken, 89.7% (26 of 29) cases were addressed with the appropriate enforcement response. The remaining three cases, two facilities were not identified as SNCs and the state addressed the violations through an informal action rather than an appropriate formal enforcement action (referenced in Finding 3-1). In the third case the state did identify the facility as a SNC, but the consent agreement that was negotiated with the facility is not considered formal enforcement since the action did not mandate compliance and is not enforceable.									
	The state met the SRF expectations for the appropriate enforcement actions that returns			_		e.				
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #				
	9a Enforcement that returns violators to compliance	100%	n/a	29	29	100%				
	10a Timely enforcement taken to address SNC	80%	84.3%	18	19	94.7%				
	10b Appropriate enforcement taken to address violations	100%	n/a	26	29	89.7%				
State Response	As noted above, two cases were not identified as SNCs and handled through informal rather than formal enforcement action. The rationale for these two decisions is discussed in DSWM's response in Section 3-1. For the third case, TDEC elected to enter into a Consent Agreement									

	rather than a Consent Order (while retaining the right to enter into a separate Commissioner or Director's Order, if necessary) to maintain a cooperative working relationship with the waste generator. The appropriateness of this approach was validated by the completion of the waste disposal effort significantly ahead of schedule.
Recommendation	

RCRA Element 5 —	- Penalties										
Finding 5-1	Meets or Exceeds Expectations										
Summary	Tennessee has may significant progress on the consideration of the economic benefit of noncompliance into penalty assessments. There we documentation in the files that all final penalties were collected, or the penalty collection was being pursued.										
	One of the objectives of the SRF is to ensure equitable treatment of violators through national policy and guidance, including systematic methods of penalty calculations. As provided in the 1993 EPA "Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements" it is EPA policy not to settle for less than the amount of the economic benefit of noncompliance (EBN) and a gravity portion of the penalty. Following the SRF Round 1 and 2 evaluations, Tennessee made progress on the documentation of EBN considerations. The state incorporated an "Economic Benefit Review Checklist" in the penalty documentation, and if EBN was not pursued a supporting justification was included in the penalty worksheet narrative. There were 17 penalty calculations reviewed and 16 of the cases (94.1%) had the appropriate EBN consideration and documentation included in the file. There was one case where there was a clear economic benefit realized by shipping hazardous wastes to a solid waste landfill, but there was no EBN included in the penalty calculation. EPA encourages TDEC to continue to emphasize the importance of EBN consideration in future penalty assessments. EPA is available to assist in this effort. TDEC does not typically negotiate penalties in RCRA enforcement administrative cases, so there was no requirement for documenting adjustments to penalty calculations in the 17 enforcement cases reviewed.										
	In 94.1% of the penalty files reviewed (1 documentation in the file indicating that collected. There was one case where the penalty, and the state is pursuing collecti	final pe respond	nalties	had b		he					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #					
	11a Penalty calculations include gravity and economic benefit	100%	N/A	16	17	94.1%					

	12a Documentation on difference between initial and final penalty	100%	N/A	N/A	N/A	N/A
	12b Penalties collected	100%	N/A	16	16	100%
State Response	Jackson-Madison County Hospital disposed of empty, used vials and packaging and did not dispose of any actual pharmaceuticals. As the estimated amount of residual waste was miniscule, the economic benefit derived from the hospital's activities was determined to be negligible (as documented in the penalty calculation worksheet).					
Recommendation						